UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,072	12/11/2000	Erik B. Christensen	146960.1/40062.72US01	3866

22971 7590 10/23/2006

MICROSOFT CORPORATION
ATTN: PATENT GROUP DOCKETING DEPARTMENT
ONE MICROSOFT WAY
REDMOND, WA 98052-6399

EXAMINER	
ROCHE, TRENTON J	

ART UNIT	PAPER NUMBER
2193	

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/734,072	CHRISTENSEN ET AL.	
	Examiner	Art Unit	
	Trenton J. Roche	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,7,8,13,14,19-27 and 31-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,7,8,13,14,19-27 and 31-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 07132006
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to communications filed 13 July 2006.

2. Per Applicants' request, amended claims 1, 2, 7, 8, 13, 14, 19-27 and 31-34 have been entered. Newly added claims 35-38 have been entered. Claims 1, 2, 7, 8, 13, 14, 19-27 and 31-38 are currently pending and have been examined.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 2, 7, 8, 13, 14 and 19-34 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 7, 8, 13, 14, 19-27 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,263,339 to Hirsch in view of U.S. Patent 6,591,272 to Williams.

Per claims 1, 7, 13 and 19:

Hirsch discloses:

- dragging a graphical representation for a server processing resource from a server explorer module to a visual design surface module to add a processing item to a programmable data object being created in the visual design surface module (Note at least Figure 1 and the corresponding sections of the disclosure. Further, "The Graphics tab 16 presents a categorized palette of all graphical objects that can be added to a scene..." in col. 5 lines 55-57)
- identifying data schema associated with the server processing resource added to the programmable data object in response to the server processing resource being dropped in the visual design surface module ("active database schema..." in col. 6 lines 35-36)
- creating a typed dataset containing data structures corresponding to the data schema associated with the server processing resource ("A data element is the graphical representation of a row resulting form a query." in col. 4 lines 48-49. As the query is processed, the resulting row would be stored in a newly created dataset containing typed data corresponding to the row data so that the graphical data element can be associated with the data resulting from the query.)
- creating a command adapter to provide data transfer commands within the programmable data object between the programmable data object and the server processing resource ("As data sources are defined, they are named and added to a world...They are then available for execution...When used in a layout, each row resulting from the query is transformed into a graphical representation represented by a data element." in col. 5 lines 14-20. A command adapter must be present to permit interaction between the data source and the graphical representation on the client.)

- creating a data transfer connection between the programmable data object and the server processing resource ("As data sources are defined, they are named and added to a world...They are then available for execution...When used in a layout, each row resulting from the query is transformed into a graphical representation represented by a data element." in col. 5 lines 14-20. A data transfer must be created if the defined data source is to interact with the graphical data elements.)

substantially as claimed. While Hirsh discloses a client process communicating with a server processing resource, Hirsh does not explicitly disclose utilizing a middle-tier stateless data object and stateless data transfer. Williams discloses in an analogous visual client server development environment the use of middle-tier stateless objects and data transfers (Note col. 29 lines 38-42.) It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize middle-tier stateless data objects and stateless data transfers in the system disclosed by Hirsh, as stateless objects would improve security in the system (note col. 18 line 50) and enable a reconnection in mid-stream with no loss of data of functionality to the user, as noted in col. 29 lines 48-42).

Per claims 2, 8 and 14:

Hirsch further discloses initialization methods to support the items added to the programmable data object as claimed. ("all graphical objects that can be added to a scene..." in col. 5 line 56. The objects must contain initialization methods if they are to be used.)

Per claims 20 and 21:

Hirsch further discloses an explorer interface module, a user interface module, and a class generation module (Note Figure 1 and the corresponding sections of the disclosure.), as well as operations to complete the drag/drop process of a server resource onto the visual design surface as claimed. (Note Figure 1 and the corresponding sections of the disclosure. When a user drops a component onto the scene, operations would complete the dropping process.)

Per claims 22, 24 and 26:

Hirsch further discloses a module for generating a function that fills a typed dataset with data obtained from a database, and a module for generating a function that updates a database using the data ("...linked to data stored in a database..." in col. 4 line 21. Further, "...showing data that has been retrieved from two datasets..." in col. 18 lines 11-12), a module for generating tables records, a module for generating the relationship data for fields within the records, and a module for generating the database views (Note col. 6 lines 32-42), and modules for generating processing functions for the data objects as claimed. ("Data sources can be named SQL queries that may be parameterized...as data sources are defined, they are named and added to a world...they are then available for execution." in col. 5 lines 12-16.)

Per claims 23, 25 and 27:

Hirsch further discloses generating updated source code for the functions as claimed. ("The data sources...may be updated automatically when data source columns are created, deleted, or edited...edit operations in the query diagram or SQL text...Changes to the query may cause the data sheet to be refreshed..." in col. 8 lines 4-21)

Per claims 31-33:

Hirsch further discloses a data connection object ("connections..." in col. 6 line 26), a managed resource module for providing the data transfer connection with address and identification information to establish the data transfer connection ("As data sources are defined, they are named and added..." in col. 5 lines 14-15. Address information must be provided if the connection is to work.), a persistent data storage for maintaining the address and identification information (This information must inherently be maintained if the system is to keep track of data sources.) as claimed.

Per claim 34:

Hirsch further discloses a properties edit module for retrieving properties, a user interface module for presenting properties, and accepting edits from the programmer, and a class update module for identifying all other items within the visual design surface module that are affected by the changes made to the edited item, and updated the identified items consistent with the edits as claimed. ("edit operations in the query diagram or SQL text..." in col. 8 lines 18-19. Further, note Figures 1 and 2. Finally, "...updated to reflect the change" in col. 9 lines 4-5)

Per claims 35-37:

Hirsh further discloses editing the processing items within the visual design surface module, the processing items comprising properties and source code ("edit operations in the query diagram or SQL text..." in col. 8 lines 18-19. Further, note Figures 1 and 2.), and updating the processing items as claimed ("...updated to reflect the change" in col. 9 lines 4-5).

Per claim 38:

Note the rejections regarding claims 31-33.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trenton J. Roche whose telephone number is (571) 272-3733. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Trenton J Roche
Examiner
Art Unit 2193

TJR

WEI ZHEN
SUPERVISORY PATENT EXAMINER